

CLAIMS:

1. A detector arrangement for the conversion of electromagnetic radiation into electrical signals, which arrangement includes sensitive areas (D1, D2, D3, D4), each of which corresponds to a respective electrical signal, it being arranged that at least two of the sensitive areas (D1, D2) mesh with one another.
2. A detector arrangement as claimed in claim 1, characterized in that the meshing of the sensitive areas (D1, D2, D3) with one another is achieved by dentation and/or interleaving.
3. A detector arrangement as claimed in claim 1 or 2, characterized in that sampling properties of the sensitive areas (D1, D2, D3, D4) are defined by a respective associated sensitive surface and that meshing is realized by way of the sensitive surfaces.
4. A detector arrangement as claimed in one of the claims 1 to 3, characterized in that the sensitive areas (D1, D2, D3, D4) are formed by photodiodes or electrodes.
5. A detector arrangement as claimed in one of the claims 1 to 4, characterized in that the sensitive areas (D1, D2, D3, D4) are all of the same size.
6. A detector arrangement as claimed in one of the claims 1 to 5, characterized in that the shape of the sensitive areas (D1, D2, D3, D4) varies.
7. An imaging X-ray system which includes a detector arrangement as claimed in one of the claims 1 to 6.
8. A method for the conversion of electromagnetic radiation into electrical signals, which method includes the following steps:
 - emission of electromagnetic radiation by a radiation source (RS),

- detection of the electromagnetic radiation by means of a detector arrangement which includes sensitive areas (D1, D2, D3, D4),
- conversion of the electromagnetic radiation into electrical signals, where each time one of the sensitive areas corresponds unambiguously to a respective electrical signal,
- 5 and at least two of the sensitive areas mesh with one another, and
- propagation of the electrical signals.